1146-05-362   **Robert W Melville*** (`romelville0@yahoo.com`), romelville0@yahoo.com, Clemson, SC 29670, and **Beth A Novick** and **Svetlana Poznanovikj**. *Reconfiguration Spaces.*

Given a finite set of sequences of length n, we can construct a graph by creating a vertex for each sequence and drawing an edge between two vertices if their corresponding sequences differ in exactly one position. We call a collection of these sets of sequences a "Reconfiguration Space" and try to answer a few questions about them. Among others questions, when is the set of all graphs arising from a Reconfiguration Space closed under taking Cartesian factors? Studying Reconfiguration Spaces generalizes and extends some results on Shortest Path Reconfiguration graphs and Coloring Reconfiguration graphs. (Received January 28, 2019)